

Folders and contents

- *1_AIS_summstats*

- *code:*

- * *X.do*: cleans the raw AIS data and combines it with ship characteristics. Produces intermediate data sets used in steps 2-4 and stores them in *data_intermediate*
 - * *01_dataprep_ais.do*: generates balanced port-to-port sample as input for the fastest routes calculation. Produces intermediate data sets used in step 2 and stores them in *data_intermediate*
 - * *PortClusters.m* identifies clusters of ports that are close to each other.
 - * *02_PanamaRoutes.do*: identifies direct port-to-port connections that pass the Panama Canal
 - * *Y.do*: produces summary statistics on the AIS data
 - * *z1-get-ship_all_variables.do*: clean raw AIS data and combine it with ship characteristics from clarkson (*these confidential original data files are not included in the replication package*). Produce *ship_all_variables.dta* and intermediate data for *get_ais_container_cleaned.dta* and *ship_port_to_port.dta2*.
 - * *z2-get-ais_container_cleaned.do*: produce *ais_container_cleaned.dta*, run after *z1-get-ship_all_variables.do*
 - * *z3-get-ship_port_to_port.do*: produce *ship_port_to_port.dta* and erase intermediate data generated in z1-z3, run after *z2-get-ais_container_cleaned.do*
 - * *Summstats-Tables_1_2_9.do*: code to produce summary statistics reported in Tables 1, 2, and 9.
 - *Output: .\1_AIS_data_summstats\output\T1-, T2- and T9-...xls*

- *2_fastest_routes*

- *code:*

- * *routes.do*: prepares the input for the fastest route algorithm and processes the output of the algorithm
 - * *routes_hrs4saga.do*: runs the algorithm (requires array computing facility)
 - * *descriptives_network*: produces figures and statistics describing the network
 - * *routes_woPA*: prepares the input for the fastest route algorithm applied to the computation of fastest routes avoiding the Panama Canal and processes the output
 - * *routes_hrs4sagaNP.do*: runs the algorithm for the fastest routes without the Panama Canal

- * *correlations_with_freight_cost.do*: compares fastest route travel times to freight cost inferred from US import data
- *3_DID*
 - *code*:
 - * *dataprep_comtrade.do*: prepares the comtrade data
 - * *exposure_measures.do*: prepares the main exposure measure and the alternative ones used in robustness checks
 - * *DID_robustness.do*: prepares additional variables used in robustness checks
 - * *DID.do*: runs the DID regression
- *4_counterfactuals*
 - *code*:
 - * *model.m*: performs all counterfactuals
 - * *AIS_fixedpoint_hat.m*, *AIS_fixedpoint_hat_nonetwork.m*: function to solve fixed points.
 - * *export_to_matlab.do*: export data to csv files used in Matlab.
 - * *Get_port-pairs-data2.do*: Gather data for all port pairs.
 - * *10_expenditure_by_port.do*: Gather data for expenditure by port.
 - * *margins.do*: Results for “The Margins of Shipping” table.
- *data_input*:
 - *BACI/* and *Comtrade_agg*: COMTRADE/BACII data
 - *gravdataFTP1319quarterly.dta*: WTO RTA database
 - *Eora26_2015_pp/*: Eora Global Supply Chain database
 - *WDI/*: World Development Indicators and INSEE

Software

- Stata 18.0
- Matlab R2019.b

Proprietary data

- The AIS port call data can be purchased from <https://www.kpler.com/company/contact-us> (formerly Marine Traffic).
- The Clarkson data can be purchased from research.crs@clarksons.com.